

(TRANSLATION)
PATENT COOPERATION TREATY
PCT
INTERNATIONAL SEARCH REPORT
(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference W1945-000000	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/JP2004/014184	International Filing date (<i>day/month/year</i>) 28.09.2004	(Earliest) Priority Date (<i>day/month/year</i>) 30.09.2003
Applicant: NIHON MEDI-PHYSICS CO., LTD.et al		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of:

- ☐ the international application in the language in which it was filed
- ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (see Box No. II).

3. ☐ Unity of invention is lacking (see Box No. III).

4. With regard to the title,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

- ☒ as suggested by the applicant
- ☐ as selected by this Authority, because the applicant failed to suggest a figure.
- ☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/014184

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ C07B59/00, C07C29/62, 31/20, 227/16, 229/36, 229/48,
C07H5/02//C07M5:00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C07B59/00, C07C29/62, 31/20, 227/16, 229/36, 229/48,
C07H5/02, C07M5:00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CA (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E, X	WO 2004/082828 A1 (Nihon Medi-Physics Co., Ltd.), 30 September, 2004 (30.09.04), Page 1, lines 5 to 8; page 6, line 24 to page 7, line 4	1-3
Y	JP 7-507813 A (General Electric Co.), 31 August, 1995 (31.08.95), Claims	1-3
Y	DE KLEIJN, J.P. et al., "Labeling with reactor produced fluorine-18. III. Polymer supported fluorine-18 as a fluorinating agent", Int.J. Appl.Radiat.Isot., 1977, Vol.28, No.6, pages 591 to 594; Chemical Abstracts, 1997, Vol.87, abstract No.167671c	1-3

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search
17 November, 2004 (17.11.04)

Date of mailing of the international search report
07 December, 2004 (07.12.04)

Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/014184

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 11-508923 A (COINCIDENCE S.A.); 03 August, 1999 (03.08.99), Claims; example 1	1-3
A	JP 11-295494 A (Nihon Medi-Physics Co., Ltd.), 29 October, 1999 (29.10.99), Claims; comparative example 1	1-3
A	WO 03/002157 A1 (AMERSHAM PLC), 09 January, 2003 (09.01.03), Page 16	1-3
A	JP 8-325169 A (NKK Corp.), 10 December, 1996 (10.12.96), Claims	1-3
A	JP 8-325168 A (NKK Corp.), 10 December, 1996 (10.12.96), Claims	1-3
A	OHSAKI, K. et al., "Polymer-supported catalysts for efficient on-column preparation of 2-deoxy- 2-[18F]fluoro-D-glucose", Applied Radiation and Isotopes, 1998, Vol.49, No.4, pages 373 to 378: Chemical Abstracts, 1998, Vol.128, abstract No.270780	1-3
A	EP 0798307 A1 (NKK Plant Engineering Corp.), 01 October, 1997 (01.10.97), Page 7, lines 19 to 26	1-3
A	WO 02/084402 A2 (CLARIANT INTERNATIONAL LTD.), 24 October, 2002 (24.10.02), Page 12, line 25 to page 13, line 2	1-3

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/JP2004/014184

WO 2004/082828 A1	2004.09.30	JP 2004-283647 A
JP 7-507813 A	1995.08.31	WO 94/21653 A1 EP 641350 A1 US 5436325 A
JP 11-508923 A	1999.08.03	WO 97/42203 A1 EP 836609 A1 BE 1010280 A3 US 6172207 B1
JP 11-295494 A	1999.10.29	EP 949632 A2 NO 9901413 A AU 9919520 A CA 2265426 A1 KR 99082848 A US 6190637 B1
WO 03/002157 A1	2003.01.09	NO 200305545 A EP 1418950 A1 KR 2004022434 A BR 200210713 A AU 2002314298 A1 HU 200400253 A2
JP 8-325169 A	1996.12.10	(Family: none)
JP 8-325168 A	1996.12.10	(Family: none)
EP 0798307 A1	1997.10.01	JP 9-263590 A JP 9-263591 A JP 9-263592 A JP 9-263593 A JP 9-263594 A US 5932178 A DE 69719831 E
WO 02/084402 A2	2002.10.24	US 2002/0197555 A1 EP 1379331 A2 JP 2004-523806 A KR 2004030576 A